

#### **REGISTERED POST**

ACL/DCW/CFO/MINES/2014-15/

Date: 29.12.2014

To
The Member Secretary,
A.P. Pollution Control Board
Paryavaran Bhavan A-III, IE, Sanath Nagar
Hyderabad-500018

Sub: Half yearly CFO Compliance report of Durga Cement works (Mines Division), granted by A.P Pollution Control Board Vide Consent Order No: APPCB/VJA/GTR/16829/HO/CFO 2014-Dated: 23.01.2014.

Dear Sir,

With reference to above, please find enclosed half yearly compliance report for Consent for Operation (CFO) of Durga Cement works (Mines Division), a unit of Andhra Cements Limited, Gamalapadu(V), Dachepalli(M), Guntur-Dist (AP) for the period from April 2014 to September 2014 for your kind information and record please.

Thanking you.

Yours faithfully
For **DURGA CEMENT WORKS**A Unit of Andhra Cements Limited

(Aniani Kumar) Sr. GM (P&QC)

Encl: As above

Copy to:

The Environmental Engineer Regional Office, A.P Pollution Control Board 102 Raghava Apartment, Brundavan garden Guntur, Andhra Pradesh Pin-522007



# ANDHRA CEMENTS LIMITED

Regd. Office & : Factory

Durga Cement Works, Durgapuram, Srinagar (P.O), Dachepalli - 522 414. Guntur Dt. Andhra Pradesh Ph: +91-8649-257428-29, Fax: +91-8649-257449

# DURGA CEMENT WORKS (MINES DIVISION)

### A UNIT OF ANDHRA CEMENTS LIMITED

DURGAPURAM (V) DACHEPALLI (M)
GUNTUR -DISTRICT (AP)

# HALF YEARLY COMPLIACE REPORT OF CFO OF DURGA CEMENT WORKS (MINES DIVISION) A UNIT OF ANDHRA CEMENTS LIMITED FOR THE PERIOD OF APRIL 2014 SEPTEMBER 2014

CONSENT ORDER NO.APPCB/VJA/GTR/16829/CFO/2014- DATE: 23.01.2014

	SCHEDU	JLE-A
S.N	CFO STIPULATED CONDITION	COMPLIANCE CONDITION
1	The applicant shall make applications through online for renewal of Consent (under Water and Air Acts) Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board along with detailed compliance to the conditions stipulated in the CFO and HWA order.	Agreed
2.	Any person aggrieved by an order made by the Sate Board under Section 25,Section 26,Section 27 of Water Act,1974 or Section 21 of Air Act,1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules,1976 and Air Rules 1982,to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of the Water (Prevention and Control of Pollution) Act,1974 and Section 31 of the Air (prevention and control of pollution) Act,1981.	Agreed.
3.	The industry may explore the possibility of tapping the solar energy for their energy requirements.	Possibility of solar energy is being explored
4.	All other conditions stipulated in the schedule –A of the earlier combined CFO & HWA order No: APPCB/VJA/GTR/534/HO/CF/2008, dated 18.11.2008 remains same. The industry shall ensure consistent compliance of each condition of Schedule –A	All other conditions stipulated in Consent Order dated.18-11-2008 are being complied.

				SCHEDU	LE -B			
1.	constitu	effluent discharged strength in excess of the defense of the delow		not contain erance limits	There are no effluents generated from the Mines. However the effluent (STP) discharged will not contain constituents in excess of the prescribed			
	Outlet	Parameter	Limit		tolerance limits			
	<b>No.</b>	pH	5.5-9	dards 0.00				
	Total suspended 200.0 mg			O mg/l				
		solids (at103-105°C) Oil &Grease	10.0					
		Chemical Oxygen		) mg/l				
		Demand(COD) BOD	100.0	0 mg/l				
2.	The in	dustry shall take steps			Following Initiatives are being taken to reduce			
	consum			oossible and	water consumption:			
		option shall NOT exc oned below	eea ti	ne quantities	Construction of STP to maintain Zero waste water discharge. Treated water reused in dust			
	S.N Purpose			Quantity	suppression & green belt development at			
	1 F	Process & Wa	shing	55.0KLD	mines area.  2. All the drainage leading to mine pit to			
		Sprinkling in Mining) Domestic		5.0 KLD	conserve the rain water.			
					Water consumption shall not exceed the allowed quantity			
3.	Total:	te water meters with nec	occor.	60.0KLD	Separate water meters provided for Mines &			
3.	be prov	ided for assessing the question of the purposes mention ring in mine pits 2.Domes	uantity ned be	of water used elow:	Domestic water consumption and records are maintained. Annexure-1			
4.		dustry shall file the wa			Being complied. Regular water Cess returns in			
	(Prever on or showing previou The ind assessi	as required under sention and Control of Pollipbefore the 5 <sup>th</sup> of every the quantity of waters month along with ward ustry shall remit water ment order as and when	ution)C ry cale r cons ter me r cess issued	Cess Act,1977 endar month, sumed in the eter readings. s as per the by Board.	Form-1 submitted to APPCB Hyderabad and APPCB Regional office, Guntur on monthly basis. Water Cess reports attached as per Annexure-2			
5.	standar than10µ size le: NO <sub>x</sub> -80 periphe	dustry shall comply with ds of PM <sub>10</sub> (Particulate μm)-100 μg/m³, PM <sub>2.5</sub> ss than 2.5 μm)-60 μg lug/m³, Outside the factory of the industry.	e Matt (Partiog/m <sup>3</sup> , ory pro	ter Size less culate Matter SO <sub>2</sub> -80ug/m <sup>3</sup> , emises at the	Being complied. On line Continuous Ambient Air Quality Monitoring is being done at 2 nos of Stations. Real time CAAQM data is being transmitted to APPCB Server and to the Display Board at factory gate. In addition to CAAQMS, 4 nos of manual AAQMS have also been working. Noise level is also being monitored.			
	Nationa Notifica 18.11.2	l Ambient Air Quality tion No.B-29016	Stan 6/20/90 0 10PM	idards CPCB D/PCL-1,dated 1)-75dB(A)	Parameters are within the prescribed limits. Ambient Air & Noise level report attached as per Annexure- 3			
6.	the pe Without	lustry shall not increase rmitted capacity mentic obtaining CFE&CFO of	the ca ned i the Bo	pacity beyond n this order, ard.	Agreed, We shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board			
7.	The Inc	dustry shall install one A	AQM S	Station on the	Complied With. AAQM station installed in up			

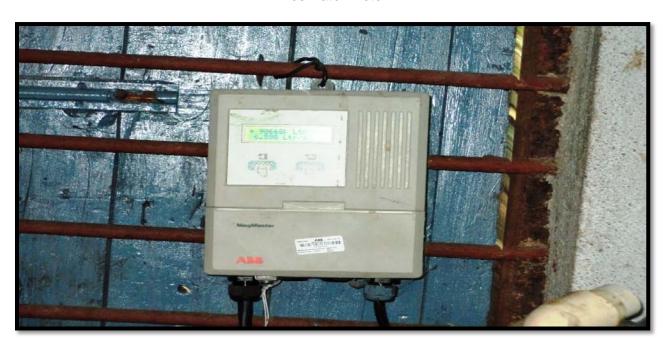
	upwind side of the village.	wind direction of the Gamalapadu village at near CPP area.
8.	The industry shall submit Bank guarantee of Rs.11.7 Lakhs with validity of 3 years for development of green belt in additional area of 117 Acers to meet the norms. Bank Guarantee will be forfeited if the green belt was not developed within 3 years. The industry shall submit action plan with time frames for development of green belt of 117 acers	Complied with. Bank guarantee of Rs.11.7 Lakhs along with Tree plantation action plan of mines submitted at Regional office AP Pollution Control Board Guntur our vide our letter no DCW/ENV/2014/2929 dated:11.03.2014. attached as per <b>Annexure-4</b>
9.	The industry shall earmark an amount of Rs.3.0 Lakhs per annum for 10 years towards the Enterprise Social Responsibility (ESR) activities. The industry shall earmark this amount towards the Enterprise Social Responsibility (ESR) activities and spend the amount under ESR activities through ESR/CSR cell in the office of the District Collector.	Complied with.CSR/ESR activities being taken by the company. CSR report for the year of 2014-15 attached as per <b>Annexure-5</b>
10.	The Industry shall develop green belt and maintain it on the over burden dumps, haul roads and also along the boundary of the mining area to control air pollution in the surrounding area.	Complied with. The industry has developed green belt and maintained at the both side of haul road of mines, boundaries and vacant places of mines area. There is no over burden dumps in our mines. Tree plantation progress report attached as per annexure-6.
11.	All waste material shall be disposed properly within the Mining Lease Area.	No wastes material generated from mining activity.
12.	All mining rejects, irrespective of size and quality, shall be hauled away from the mine.	No mining rejects are generated.
13.	The natural drainage of water shall be maintained. The Dump sites shall not cross any streams. Water flow from the Mines Lease Area shall be free of suspended matter and conform to prescribed water quality standards even during the monsoon.	Being Complied. Natural drainages are not being obstructed in mines lease area. Water of Mines meets the quality standards.
14.	Plantation with native species shall be raised along the roads, dump sites to develop a wide greenbelt all around the ML area in consultation with local DFO/Agriculture department.	Tree plantation has been done of native species along the roads, vacant places and boundary wall of ML area. Tree Plantation progress report attached as above
15.	Dumping of overburden shall be like a retreating pyramid bench formation and shall carry physical and biological reclamation concurrently. Dumps shall be contoured and provided with relief control and stabilized. Dump tops shall be compacted, leveled and provided with proper drainage.	There is no overburden in ML area.
16.	Soil binding and nitrogen fixing plants shall be planted in the Mine Lease Area. Biological reclamation shall be done in two phases. The first phase shall be with appropriate quick growing grass and shrubs and in the second phase slower growing native shrubs and trees shall be grown.	Soil binding and nitrogen fixing tree plants have being planted in ML area. Photo graphs are attached as per <b>Annexure: 7</b> Tree plantations will be done as directed.
17.	Check dams and filter beds shall be constructed to protect from stream runoffs.	Check dams have being constructed to protect stream runoff. Photographs are attached as per <b>Annexure-8</b>
18.	Ground water table levels shall be monitored every season. Any lowering of the ground water table in comparison to the previous season shall be	Ground water depth level is being regularly monitored in every season. Reports are attached as per <b>Annexure-9</b>

	reported to the Board immediately. Discarded pits shall be allowed to fill with water.	
19.	Vehicles shall be well maintained and engine idling shall be minimized. Vehicle cabs shall be made dust –proof.	Being complied.
20.	Drills shall be water jacketed. Local exhaust ventilation systems shall be installed at dust generation points and the dust shall be fed to a dust collection system.	Being Complied. Water injector and dust collection cyclone system installed in drilling machine for the control of air pollution. Photographs attached as per <b>Annexure-10</b>
21.	Blasting shall be sequential in such a manner as to achieve minimum vibration	Being complied. Sequential blasting methods applied for minimum vibration.
22.	The industry shall maintain four ambient air quality monitoring stations in the core zone as well as in the buffer zone for monitoring RPM, SPM, NO <sub>x</sub> , and SO <sub>2</sub> .Location of the ambient air quality stations shall be decided based on metrological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring shall be undertaken in consultation with the APPCB.	Being complied. 4 Nos AAQM station& 2 Nos CAAQMS station have being installed and being maintained. Location of AAQM stations decided with the consultation of A.P. Pollution Control Board Guntur. Photo graphs are attached as per Annexure:11
23.	A separate environmental management cell with suitable qualified personnel shall be set up under the control of senior executive who will report directly to the head of the organization.	Being complied. An organization chart of Environment management cell attached as per annexure:12
24.	The industry shall comply with all other conditions stipulated in the CFE order dated 27.06.2008 including conditions Nos.4 and 5 of Schedule B pertaining to air and noise pollution control from mines.	All other conditions stipulated in CFE dated.27-06-2008 are being complied.
25.	The industry shall comply with all the Board directions issued from time to time.	Agreed
26	The applicant shall submit Environment statement in Form V before 30 <sup>th</sup> September of every year as per Rule No.14 of E (P) Rules, 1986 & amendment thereof.	Complied with. Last Environment Statement in Form-V sent vide our letter no. ACL/DCW/ENV/MINES/2014/4022 dated 20-09-2014.
27.	The conditions are without prejudice to the rights and contentions of this Board in any Hon'ble court of law.	Agreed.

# Separate water meter provided for mines & domestic water consumption



Mines water meter



**Domestic water meter** 

#### REGISTERED POST

#### DCW/P&QC/ENV/09-14/ 4/40

Date: 06.10.2014

The Member Secretary, AP Pollution Control Board Paryavaran Bhavan A-III, I.E., Sanath Nagar HYDERABAD- 500 018

Subject: Monthly Monitoring Report for the Lime Stone Mines of Durga Cement Works at village Gamalapadu, Mandal –Dachepalli, Dist-Guntur (AP)

Ref: CFO vide order no: APPCB/VJA/GTR/16829/HO/CFO/2014, Dt.23.01.2014

Dear Sir,

Please find enclosed following reports of Durga Cement Works (Mines Division) a unit of Andhra Cements limited for the month of September 2014.

- 1. Monthly water consumption report of Mines
- 2. Ambient air quality monitoring report of mines,
- 3. Noise level report of mines

This is for your kind information and records.

Thanking You

Yours faithfully,
For **Durga Cement Works** (Mines Division)
(A unit of Andhra Cements Limited)

Encl: a/a

Anjani Kumar) Sr GN (P&QC)

CC: The Environmental Engineer
AP Pollution Control Board, Regional Office
102, Raghava Apartments, Brundavan Gardane,
GUNTUR – 522 007

# **DURGA CEMENT WORKS**

A Unit of Andhra Cements Limited Gamalapadu(V), Dechepalli(M),Dist- Guntur Andhra Pradesh

# AMBIENT AIR QUALITY MONITORING REPORT APRIL 2014 TO SEPTEMBER 2014

	LOCATION -1 NEAR MINE PIT-1, (CROSS WIND)									
S.N		PM-2.5 μg/m <sup>3</sup>	PM-10 μg/m <sup>3</sup>	SO <sub>2</sub> μg/m <sup>3</sup>	NO <sub>2</sub> μg/m <sup>3</sup>					
1	MAX.	32.25	62.09	8.83	15.45					
2	MIN.	12.72	41.5	3.19	4.93					
3	AVG.	23.08	50.32	6.43	10.31					
4	STD DEV.	3.85	4.83	1.21	1.83					
5	COFF. OF VARIATION	0.17	0.10	0.19	0.18					
6	98 PERCENTILE	31.77	59.83	8.48	14.97					
	LOCATION -2 NEAR NA	AGULERU RIVEI	R PUMP HOUS	E, (CROSS W	IND)					
S.N		PM-2.5 μg/m <sup>3</sup>	PM-10 μg/m <sup>3</sup>	$SO_2 \mu g/m^3$	NO <sub>2</sub> μg/m <sup>3</sup>					
1	MAX.	27.85	49.64	8.22	14.44					
2	MIN.	10.27	34.62	2.96	5.39					
3	AVG.	19.64	42.34	5.59	9.07					
4	STD DEV.	3.66	3.63	1.49	2.12					
5	COFF. OF VARIATION	0.19	0.09	0.27	0.23					
6	98 PERCENTILE	27.01	27.01 49.06		13.48					
LC	OCATION -3 NEAR CPP (	TOWARDS GAMALAPADU VILLAGE), (UP WIND)								
S.N		PM-2.5 μg/m³ PM-10 μ		$SO_2 \mu g/m^3$	NO <sub>2</sub> μg/m <sup>3</sup>					
1	MAX.	34.69	64.96	8.86	14.89					
2	MIN.	17.80	40.23	4.01	6.71					
3	AVG.	25.40	52.10	6.57	10.62					
4	STD DEV.	3.63	4.59	1.28	1.98					
5	COFF. OF VARIATION	0.14	0.09	0.19	0.19					
6	98 PERCENTILE	33.18	60.92	8.69	14.48					
LOC	ATION -4 COLONY AREA	A (TOWARDS S	RI NAGAR VIL	LAGE),(DOW	N WIND)					
S.N		PM-2.5 μg/m <sup>3</sup>	PM-10 μg/m <sup>3</sup>	SO <sub>2</sub> μg/m <sup>3</sup>	NO <sub>2</sub> μg/m <sup>3</sup>					
1	MAX.	28.49	47.94	8.90	14.98					
2	MIN.	12.97	33.25	2.96	5.66					
3	AVG.	19.29	41.73	5.36	8.72					
4	STD DEV.	3.19	3.89	1.74	2.30					
5	COFF. OF VARIATION	0.17	0.09	0.32	0.26					
6	98 PERCENTILE 24.81 4		47.74	8.69	14.48					

# **DURGA CEMENTS WORKS**

**A Unit of Andhra Cements Limited** 

Dugapuram, P.O- Srinagar, Dachepalli (M), dist-Guntur, (A.P)

# **NOISE LEVEL REPORT**

(April-2014 to September 2014

# 1. Colony area

	Day Time dBA	Night Time dBA
MAX	45.6	43.6
MIN	41.5	40.5
AVG	43.48	42.28
STD DEV.	1.19	0.94
COFF. OF VARIATION	0.03	0.02
98 PERCENTILE	45.6	43.6

## 2.Near Time Office

	Day Time dBA	Night Time dBA
MAX	55.30	53.70
MIN	45.60	44.80
AVG	51.55	49.87
STD DEV.	2.46	2.26
COFF. OF VARIATION	0.05	0.05
98 PERCENTILE	55.02	53.22

# **3.Near Mine Office**

	Day Time dBA	Night Time dBA		
MAX	55.80	53.80		
MIN	44.50	42.10		
AVG	52.43	50.53		
STD DEV.	2.32	3.15		
COFF. OF VARIATION	0.04	0.06		
98 PERCENTILE	55.40	53.72		

DCW/ENV/2014/2929

DURGA CEMENT WORKS A Unit of Andhra Cements Limited

The Environmental Engineer,

AP Pollution Control Board, Regional office,

102, Raghava Apartments, Brundavan Gradens,

Guntur, Andhra Pradesh

Pin - 522 007

Subject: Submission of Bank Guarantee no.G00lBGF140550001 dt, 24-02-2014 of Rs.11.70 lakhs (Rupees Eleven lakhs seventy thousand only) as per Consent Order along with trees plantation action plan of Durga Cement Works (Mines Division), M/s Andhra Cements Ltd; Dachepalli, Guntur(AP)-522414

Reference: APPCB consent order no.: APPCB/VJA/GTR/16829/HO/CFO/2014 dated: 23.01.2014

Dear Sir,

whis has reference to the clause no. 8 of above Consent Order issued in our favour. Bank Guarantee no. G00IBGF140550001 dt. 24-02-2014 of Rs.11.70 lakhs (Rupees Eleven lakhs seventy thousand only) issued by the Karur Vysya Bank limited, 882 Master Prithivinath Marg, Karolbag, New Delhi - 110005 is enclosed .B.G. is valid up to 28.02.2017. Tree plantation action plan for 3 years for the Mines area of 117 acres of Durge Cement Works (Mines Division) is also submitted herewith for your kind information please. Kindly acknowledge the receipt of B.G.

Thanking you,

Yours faithfully, For Durga Cement Works (A unit of Andhra Cements Limited)

Encl: a/a

Cc: The Member Secretary, - For kind information please. AP Pollution Control Board, Paryavaran Bhavan, A-III, I.E., Sanath Nagar, Hyderabad- 500 018

ANDHRA CEMENTS LIMITED

Regd. Office &

Durya Cemant Works, Durgapuram, Srinagar (P.O), Dachepall: - 522414, Guntur District, Andhra Pradesh Ph: +91 - 8849 - 257428, Fax: +91 8649-257428

# Various measures of CSR activities being done in the surrounding villages

- 1. Education.
- 2. Filter Water supply. Maintenance and Support.
- 3. Dandivagu Lift Irrigation Scheme. Maintenance and Support.
- 4. Health & Hygiene.
- 5. Medical Camps.
- 6. Street lights illumination.
- 7. Cutting and cleaning bushes.
- 8. Financial Assistance for maintenance of Religious places.
- 9. Contribution for Annadanam in a Temple procession.
- 10. White-washing & colouring of Religious places.
- 11. Supporting for Athletic Champion Sports meet in the District.
- 12. Providing Tricycles for the physically challenged persons.
- 13. Providing Aggregate chips for construction of church etc.
- 14. Laying water pipe line in Srinagar village.
- 15. Providing Aggregate chips for filling the pit holes of the Road connecting Ramapuram village to State High Way.
- 16. Repairs and Reconstruction of School compound wall & Grampanchayat office compound wall.
- 17. Providing Medical check ups to all students with free medical help and energy food to Junior Class students (weekly twice) at Durga Public School.
- 18. Construction of Kalyana Mandapam.
- 19. Road repair work / Cementing of road.
- 20. Provided R.O. Plant at Srinagar Village under NTR SUJALA PATHAKAM and inaugurated by Shri Yarapathineni Srinivasa Rao, MLA on 02-10-2014.
- 21. Providing free R.O. Drinking water.
- 22. Providing Free Medical facilities, Ambulance and Fire services in Emergencies to the neighbouring villages.

#### SUMMARISED CSR ACTIVITIES & EXPENSES PLANNED FOR 2014-15 & 2015-16

S.No.	Item	Amount
		(Rs.in Lakhs)
1	Provided R.O.Plant at Srinagar village under NTR SUJALA PATHAKAM, inaugurated by Shri Yarapathineni Srinivasa Rao, MLA on 02-10-2014	2.70
2	Extension of water pipe line in one of wards in Srinagar Village	4.00
3	a) Drinking water supply scheme     b) Pump house repairs are to be carried out as the pipeline system was introduced in 1995 and rusted	2.40 4.00
4	Dandivagu Lift Irrigation Scheme	1.60
5	Improving Health & Hygiene in surrounding villages	10.00
6	Aggregate chips for filling pit holes of the Road connecting Ramapuram village to State High way – 2.5 Kms	11.00
7	a) Repairs to the construction of School compound wall in Gamalapadu village – 350 Mtrs with main gate.	6.00
	b) Grampanchayat Office compound wall repairing (collapsed wall) and gate	2.50
8	Financial assistance for maintenance religious places in surrounding villages	1.00
9	Construction of Kalyana Mandapam in Ramapuram Village	10.00
10	Laboratory and Library renovation in Durga Public School	5.00
11	White-washing & colouring of Siva Temple in Ramapuram in connection with Mahasivaratri	0.10
12	Cutting & Cleaning bushes in Srinagar village	0.60
13	Road repair work / Cementing of road work in Ramapuram & Gamalapadu villages together = 500 Metres	15.00
14	Compassionate grounds subsidized / free education to poor / suffering / deserved people	3.00
15	Providing medical check ups to all students at DPS with free medical help and energy food to lower class (weekly twice)	1.50
16	Providing free R.O. water (including supply of regular water in times of power/water supply failure), emergency medical services and ambulance and fire services	4.00
17	Providing Free Medical facilities, Ambulance and Fire services in Emergencies to the neighbouring villages.	2.50
	TOTAL EXPENDITURE	Rs.86.90 Lac

# **DCW CSR ACTIVITIES**



RO Water Plant Provided in Srinagar village





Street light & Water supply pipe line provided in Srinagar Village

# **DCW CSR Activities**Durga Public School of DCW





# **SUBJECT: MEDICAL HELTH CHECKUP AT DCW DSPENCERY**







#### **Status of Green belt development (Mines)**

Total mine lease area:

Green belt up to March 2014

Tree plantation from April 2014 to September 2014

Existing green belt area

Name of tree planted

No. of tree planted

- 170.22 Ha

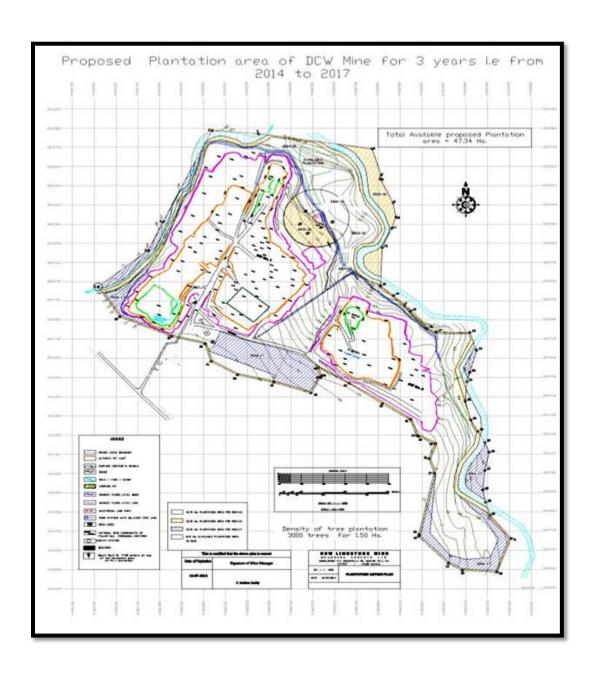
- 4.69 Ha.

2.47 Ha.

- 7.16 Ha.

- Neem, Cono Carpues

- 660 nos







**Tree Plantation at mines area** 





Tree Plantation done boundary wall of mines



Mines road concreated along with tree plantation

# SOIL BINDING AND NITROGEN FIXING TREES PLANTED IN MINES AREA



# **CHECK DAMS AT DCW MINES**



## **GROUND WATER LEVEL REPORT**

## **PRE MONSOON SEASON**

#### 24.04.2013

S.N	Location	Direction	Distance from Plant	Bore Well/Open well	Depth of Water from ground Level (Meter)
1.	Plant site (Near Security man Gate)	S	-	Bore Well	12
2.	Srinagar Village	SW	1.5 Km	Bore Well	19
3.	Ramapuram Village	NW	6.0 KM	Bore Well	23
4.	Gamalapadu Village	SE	5.0 KM	Bore Well	8

# **GROUND WATER LEVEL REPORT**

## **MONSOON SEASON**

#### 02.08.2014

S.N	Location	Direction	Distance from Plant	Bore Well/Open well	Depth of Water from ground Level (Meter)
1.	Plant site (Near Security man Gate)	S	-	Bore Well	11
2.	Srinagar Village	SW	1.5 Km	Bore Well	18
3.	Ramapuram Village	NW	6.0 KM	Open Well	21
4.	Gamalapadu Village	SE	5.0 KM	Bore Well	5

#### WATER TESTING REPORT OF DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

Sample received: 22.04. 2014

Sample analyzed by: Environment Lab JBCP

S.N	Parameter	er Location	Sri nagar Village	Gamalapa du Village	Colony	Club	Krishnan	DCW	Drinkin	0500 g Water ers Limit
		Type of Water		Во	re		River	Drinking Water	Desirable Limit	Permissible limit
1.	рН		8.56	7.80	8.10	8.45	7.8	7.5	6.5 to 8.5	6.5 to 8.5
2.	Conductivity (µs)		1856	1963	2045	1676	316	39.5	NA	NA
3.	Turbidity(NTU	1)	1.5	1.6	1.7	1.8	1.95	0.61	5-10	5-10
4.	Total Hardnes (mg/l)	SS	547	513	605	654	149	91	300	600
5.	Calcium Hardi	ness (mg/l)	463	455	524	580	126	78	75	200
6.	Magnesium Hardness (mg	/۱)	84	58	81	74	23	13	30	100
7.	TDS (mg/l)		1326	1425	1356	1457	281	34.2	200	2000
8.	TSS (mg/l)		-	-	-	-	67	-	100	100
9.	Alkalinity (mg	/۱)	172	182	215	226	76	41	200	600
10.	Chlorides(mg/	<b>/</b> I)	79	105	86	93	70	12	250	1000
11.	Fluorides (mg	/I)	0.1	0.2	0.3	0.4	0.2	0.3	0.5	1.5
12.	Arsenic (mg/l)		0.002	0.005	0.003	0.004	0.002	<0.005	0.05	0.05

#### WATER TESTING REPORT OF DURGA CEMENT WORKS

A Unit of Andhra Cements Limited

Sample received: 21.07. 2014

Sample analyzed by: Environment Lab JBCP

S.N	Parameter	Location	Sri nagar Village	Gamalapadu Village	Colony	Club	Krishnan	Drink		10500 ing Water ders Limit
		Type of Water	Bore				River	Drinking Water	Desirable Limit	Permissible limit
1.	рН		8.10	8.58	7.90	8.36	8.10	7.85	6.5 to 8.5	6.5 to 8.5
2.	Conductivity (µs)		1658	1763	1475	1463	362	43.6	NA	NA
3.	Turbidity(NTU)		1.8	1.7	1.9	1.6	1.75	0.58	5-10	5-10
4.	Total Hardness (mg/l)		657	589	629	583	175	82	300	600
5.	Calcium Hardness (mg/l)		592	502	551	532	155	65	75	200
6.	Magnesium Hardness (mg/l)		65	87	78	51	20	17	30	100
7.	TDS (mg/l)		1256	1312	1365	1205	263	85.6	200	2000
8.	TSS (mg/l)		-	-	-	-	13	-	100	100
9.	Alkalinity (mg/l)		162	174	201	171	71	42	200	600
10.	Chlorides(mg/l)		47	51	43	53	65	22	250	1000
11.	Fluorides (mg/l)		0.2	0.1	0.2	0.3	0.2	0.4	0.5	1.5
12.	Arsenic (mg/l)		0.002	0.004	0.005	0.003	0.005	<0.005	0.05	0.05

### WET DRILLING PRACTICE AT DCW MINES



Dust collector cyclone

#### **4 NOS. AAQM MONITORING STATION**





Near CPP



Nagularu River Pump House



Colony area

Near Mines Pit-1

## 2. Nos CAAQMS UP WIND & DOWN WIND DIRECTION





#### **DURGA CEMENT WORKS**

(A UNIT OF ANDHRA CEMENTS LIMITED)
GAMALAPADU (V), DECHEPALLI (M)
Dist. Guntur, AP

#### **ORGANIZATION STRUCTURE OF ENVIRONMENT MAMNAGMENT CELL**

